

ABSTRACT OF THE DISCLOSURE

[0042] An IEEE 802.3 compliant physical layer device provides efficient loading of configuration information of the physical layer device. The configuration information is written into a volatile memory in the physical layer device, and then uploaded to at least one EEPROM. The configuration information is downloaded to the volatile memory during startup of the physical layer device. The system controller can also directly access the EEPROMs, bypassing the volatile memory. By providing a bridge between the system controller and the EEPROMs and providing additional bits in the volatile memory of the physical layer device, the system controller can read and write the EEPROMs one byte at a time. During reset time, the content of the EEPROMs is written to registers in the physical layer device to configure the physical layer device.